S. HRG. 100-36

NTIA AUTHORIZATION

HEARING

BEFORE THE

SUBCOMMITTEE ON COMMUNICATIONS

OF THE

COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION UNITED STATES SENATE

ONE HUNDREDTH CONGRESS

FIRST SESSION

ON

S. 828

TO PROVIDE AUTHORIZATION OF APPROPRIATIONS FOR ACTIVITIES OF THE NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRTATION

MARCH 26, 1987

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CONTENTS

	Page
Opening statement by Senator Inouye	1
Opening statement by the Chairman	2
Opening statement by Senator Pressler	10
Text of S. 828	2

LIST OF WITNESSES

Sikes, Alfred C., Assistant Secretary for Communications and Information, Administrator of the National Telecommunications and Information Administration, Department of Commerce	2
Prepared statement	4
Letter of April 10, 1987	14
Questions of Senator Inouye and the answers	15

NTIA AUTHORIZATION

THURSDAY, MARCH 26, 1987

U.S. SENATE,
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,
SUBCOMMITTEE ON COMMUNICATIONS,
Washington, D.C.

The subcommittee met, pursuant to notice, at 2:08 p.m. in Room SR-253, Russell Senate Office Building, Hon. Daniel K. Inouye [chairman of the subcommittee] presiding.

Staff members assigned to this hearing: Tom Cohen, staff counsel and Katherine Meier, minority staff counsel.

OPENING STATEMENT BY SENATOR INOUYE

Senator INOUYE. This afternoon we are considering S. 828, a bill to reauthorize the National Telecommunications and Information Administration. The bill authorizes $14,718,000 for NTIA for fiscal year 1988 and $15 million for fiscal year 1989 and allows for necessary non-discretionary cost increases.

The 1988 amount duplicates the funding request contained in the President's budget and essentially maintains the level of funding expended last year.

This hearing will give the subcommittee an opportunity to find out how NTIA has been operating and what its plans are. NTIA serves as the principal advisor to the executive branch on domestic and foreign telecommunications issues, develops plans and policies regarding these issues, manages Federal use of the radio frequency spectrum, and conducts a variety of research activities.

In carrying out these duties, NTIA has issued several reports in recent months analyzing the domestic telecommunications market. Those reports concerning the effect of the modified final judgment limitations on telecommunications trade, the growth of competition in the local exchange sector, and the scrambling of cable satellite signals have all helped to shape the policy discussions on these issues.

Especially important in today's world is NTIA's role in the international arena. NTIA has chaired and co-chaired U.S. delegations concerning negotiations with foreign nations to advance U.S. trade possibilities. It also coordinates U.S. policies within international standard-setting organizations.

We are learning more every day how countries can use rigid technical standards as barriers to entry by American firms, just as they use tariffs and foreign ownership limitations.

Several of these standards-setting conferences will be meeting in the near future.

I also note in particular NTIA's work in administering the China Protocol, an agreement which may lead to greater opportunities for American businesses in China. NTIA has also conducted an increased number of studies of telecommunications developments in less developed countries.

I hope that we can explore all of these issues during this hearing and that Mr. Sikes will take advantage of this opportunity to educate us as fully as possible.

Before calling upon the witness, I have an opening statement that Senator Hollings would like to have included in the record and also the bill.

[The statement and bill follow:]

OPENING STATEMENT BY THE CHAIRMAN

I am pleased to have this opportunity to hear from Assistant Secretary Sikes regarding the recent activities of NTIA. As you know, I am very interested in the efforts of this administration to improve this Nation's trade deficit, and I am particularly interested in knowing what steps NTIA has taken in this area. As the President's primary advisor on telecommunications issues, Assistant Secretary Sikes knows as well as anyone of the constraints upon our telecommunications industry's efforts to obtain access to overseas markets. I hope that the Assistant Secretary will suggest specific actions to eliminate our telecommunications trade deficit. I also look forward to his comments on the general status and future of the communications marketplace.

[S. 828, 100th Cong., 1st Sess.]

To provide authorization of appropriations for activities of the National Telecommunications and Information Administration

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That there is authorized to be appropriated for activities of the National Telecommunications and Information Administration $14,718,000 for fiscal year 1988, and $15,000,000 for fiscal year 1989, together with such sums as may be necessary for increases resulting from adjustments in salary, pay, retirement, other employee benefits required by law, and other nondiscretionary costs, for each of the fiscal years 1988 and 1989.

Senator INOUYE. Senator Packwood do you have a statement?

Senator PACKWOOD. I have no statement, Mr. Chairman.

Senator INOUYE. Then it is my privilege to call upon Mr. Alfred Sikes of the NTIA.

STATEMENT OF ALFRED C. SIKES, ASSISTANT SECRETARY FOR COMMUNICATIONS AND INFORMATION, ADMINISTRATOR OF THE NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION, DEPARTMENT OF COMMERCE

Mr. SIKES. Thank you, Mr. Chairman. I have a prepared statement and a copy of our most recent annual report to the committee. With your permission, I would like to submit those for the record.

Senator INOUYE. Without objection, your statement and the report [1] will be made part of the record.

Mr. SIKES. NTIA was set up in 1978 when several executive branch operations were consolidated in the Commerce Department. One of our principal functions, regulating the Federal Government's own use of the radio frequency spectrum, dates back to 1922. So in a sense, our historical roots go back almost to the very beginning of the communications industry in this country.

We have six major programs that are discussed both in the statement and in the annual report. We function, as you have indicated, as the executive branch communication policymaker, making recommendations to the President, to the FCC, to the Congress, and to international bodies.

We manage the Government's own considerable use of the radio spectrum, conduct research on communications, and provide technical support for other Government agencies on a reimbursable basis through our research center, the Institute for Telecommunication Sciences in Boulder, CO.

We also administer the public telecommunications facilities program, which makes matching grants in support of public broadcasting facilities projects. At the present time, NTIA's activities span the whole range of domestic and international communications.

In the domestic common carrier, cable TV, and broadcasting areas, we have been involved in the current review of the AT&T consent decree. We were active in the must-carry and scrambling controversies, and initiated the AM radio improvement program.

In the International Telecommunication Union, we have bee major participants in the recent high frequency conference dealing with shortwave broadcasting, and are in the midst of preparing for this fall's mobile radio conference.

On the trade and competitive front, we have been extensively involved in market opening talks with West Germany, France, Spain, as well as Japan and South Korea, although I should parenthetically add that our formal talks with South Korea begin in about two weeks.

In that regard, I should also note that just last summer we concluded a special protocol with the People's Republic of China, which we hope will have positive results for American businesses. And we continue to be heavily involved in overseeing U.S. participation in the INTELSAT and INMARSAT organizations.

I would rank our programs regarding U.S. communication, industry competitiveness and overseas market access as major personal priorities.

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[1] The report was not reproducible.

Communications is the basic underpinning for the future information economy. It is also a way that we can strengthen the global competitiveness of American industry generally. It is critically important for us to mobilize our communications industry resources to the maximum extent possible, and to reduce barriers which limit the ability of business to harness the efficiencies inherent in communications.

At the same time, we have to ensure that our communications industry itself remains strong and competitive. One way we can do that is to expand the ability of our companies to sell into overseas markets. We are trying to do as much as we can within our budget resources. Mr. Chairman, and I hope that we can continue to count on the subcommittee's support.

Thank you.

[The statement follows:]

STATEMENT OF ALFRED C. SIKES ASSISTANT SECRETARY FOR COMMUNICATIONS AND INFORMATION, DEPARTMENT OF COMMERCE

Mr. Chairman and Members of the Subcommittee: Thank you for this opportunity to testify in support of legislation to authorize appropriations for the National Telecommunications and Information Administration (NTIA) for fiscal years 1988 and 1989.

BACKGROUND

NTIA was formally established in 1978 through the consolidation of the Office of Telecommunications Policy (OTP) in the Executive Office of the President and the Commerce Department's Office of Telecommunications.[1] NTIA's historical antecedents, however, trace back to the earliest days of the communications industry in this country.

Secretary of Commerce Herbert C. Hoover formed the Interdepartment Radio Advisory Committee (IRAC), which NTIA today still chairs, almost precisely 65 years ago, in April 1922. President Coolidge assigned responsibilities to manage the Government's use of the radio spectrum to IRAC in 1927, the same year that the Federal Communications Commission's (FCC) predecessor, the Federal Radio Commission, was created by Congress to oversee private sector radio use.

IRAC continued to discharge Presidential frequency assignment functions under section 305 of the 1934 Communications Act. President Truman in 1950 by Executive Order then established a "Communications Policy Board" and, in turn, the position of "Telecommunications Adviser to the President" was created.[2] In 1970, Executive branch communications policy responsibilities were consolidated by statute in OTP, and those duties were essentially moved from the Executive Office of the President to the Commerce Department in 1978, as I indicated.

AGENCY RESPONSIBILITIES

NTIA's responsibilities today include—Serving as the principal Executive branch adviser to the President on domestic and international telecommunications policy;

Developing and presenting Executive branch policy on communications and information services;

Setting policies for and managing use of the radio spectrum by the Federal Government, in accordance with section 305 of the Communications Act (47 U.S.C. 305);

Developing, in conjunction with the FCC, the State Department, and other agencies, U.S. international communications policies for presentation at international conferences and meetings, and overseeing the activities of the Communications Satellite Corporation (Comsat) as U.S. Signatory to the International Telecommunications Satellite Organization (INTELSAT) and the International Maritime Satellite Organization (INMARSAT);

Providing technical support to other agencies and conducting communications research, chiefly through our Institute for Telecommunication Sciences (ITS); and,

Administering the Public Telecommunications Facilities Program (PTFP), which makes matching capital grants in aid of nonprofit communications sector equipment purchases and station construction projects.

Under the legislation that the Department of Commerce will recommend, NTIA would be authorized appropriations—exclusive of the PTFP—of $14.7 million for fiscal year 1988, and such sums as may be needed in 1989. Allowance would also be made for any additional appropriations that might be necessary to cover nondiscretionary cost increases, such as employee pay raises.

PTFP, as you know, is a separately authorized program with its own appropriation. The Administration has recommended that it be terminated this fiscal year because the program has essentially accomplished the purposes for which it was created—namely, to establish a sound national public broadcasting infrastructure. Our proposed authorization bill is based on the assumption that Congress will go along with the Administration's recommendation.

CURRENT ACTIVITIES

NTIA's activities today span the whole range of telecommunications and related information issues—domestic telephone policy, mass media issues, international communications problems, Federal spectrum management, and research into ways to use the radio spectrum more effectively.

Domestically, NTIA is continuing to develop and advocate appropriate policies for a sector where technology and commercial realities are rapidly changing. We recently published major reports, for example, on local telephone market competition, and the domestic and international competitive implications of changing the AT&T consent decree. We have also participated in the debate over cable television and broadcast regulatory policies.[3]

Internationally, we have been heavily involved in international conference efforts, such as the recent High Frequency (Shortwave Radio) Conference, and in preparing for the Mobile Radio Conference which the International Telecommunication Union (ITU) will convene this fall.

NTIA played a major leadership role in conjunction with the President's November 1984 decision that new U.S.-based international satellite systems separate from INTELSAT are required in the national interest.[4] Together with the State Department and the FCC, we have been working hard to implement this policy which we believe could add significantly to the communications service options that American business needs to compete more effectively overseas.

Additionally, NTIA and other Executive agencies have been devoting substantial attention to expanding the opportunities for U.S.-based companies to compete in communications goods and services markets abroad. We have been especially active with respect to the West German, French, Korean, Spanish, and Japanese communications and information services markets, and have provided support for those agencies which have lead responsibility for other markets such as Italy and Britain.

Given the serious and escalating trade deficits the United States has incurred in this key high-tech sector, I personally place great importance on our market opening efforts. Expanding U.S. communications trade opportunities, in my view, is the best means of resolving the difficulties we currently confront in this field.

We have also been increasingly involved in working with developing countries on telecommunications matters. I serve ex officio on the board of the U.S. Telecommunications Training Institute, for example, and we collaborate each year with the private sector and the FCC in providing communications management training to officials from developing nations. On May 16, 1986, a telecommunications protocol or exchange agreement was signed between NTIA and the Ministry of Posts and Telecommunications of China. NTIA communications experts have also provided technical and planning assistance to countries such as Jamaica and Guatamala, in conjunction with the President's Caribbean Basin Initiative.

Our Federal radio spectrum management activities, which account for a major part of our budget, are also critical. The Government is by far the largest user of the spectrum, relying upon radio communications to meet the full gamut of public service, air traffic control, weather monitoring, law enforcement, and national defense require-

ments. As both Government and nonGovernment radio spectrum demands grow, efficiently managing this finite national resource becomes more and more important.

In this regard, the research and technical assistance programs of our Boulder, Colorado-based laboratories, ITS, have special importance. A large part of ITS's resources are devoted to finding new, more efficient ways in which to use the spectrum, and thus accommodate all requirements to the maximum extent possible. Several of the engineers at ITS, I should also note, are world-recognized authorities who serve in leadership positions on a number of ITU study groups and committees.

CONCLUSION

Communications and information services today constitute an increasingly pivotal component of our economy and, indeed, our society overall. How effectively these services function thus has major ramifications. How effectively NTIA does its job also has a bearing on these core industries and how well they will continue to serve our country.

We have a firm tradition of working affirmatively with Congress, and particularly with this Subcommittee. We look forward to continuing to do so in the future.

Thank you, Mr. Chairman, and I would be pleased to answer any questions which you or the Subcommittee might have.

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[1] Reorganization Plan No. 1 of 1977, 91 Stat. 56101; Executive Order 12046, 3 CFR 158 (1978 comp.).

[2] See Report by the President's Communications Policy Board, "Telecommunications: Program for Progress" (March 1951); Final Report by the President's Task Force on Communications Policy, Ch. 9 (December 1968).

[3] See, e.g., NTIA Special Publication 87-19, "NTIA Trade Report: Assessing the Effects of Changing the AT&T Consent Decree" (February 1987); NTIA Report, "Competition in the Local Exchange Telephone Service Market" (February 1987).

[4] Presidential Determination No. 85-2 of November 28, 1984, 49 Fed. Reg. 46937 (November 30, 1984). Senior Interagency Group on International Communication and Information Policy, "White Paper on New International Satellite Systems" (February 1985).

Senator INOUYE. Thank you very much, Mr. Sikes.

Between 1971 and 1985, the PEACESAT program provided telecommunications to 110 terminals in the Pacific islands through the use of NASA's ATS-1 satellite, allowing remote island groups access to Honolulu, Guam, Japan, Australia, and New Zealand for medical and environmental emergencies and for educational purposes.

As you are aware, ATS-1 was deactivated in 1985, when it ran out of station-keeping fuel. The NASA ATS-1 replacement satellite study recommended the MARISAT satellite as one of the most viable alternatives to reactivate PEACESAT.

Does your organization support the use of the MARISAT satellite as a replacement satellite for PEACESAT? And what will NTIA do to support the efforts to re-establish this PEACESAT link?

Mr. SIKES. First, last year we provided a $200,000 grant from our public telecommunications facilities program to help plan the future communications for that part of the world.

Secondly, I have alerted our people, because we chair the IRAC, the Interdepartment Radio Advisory Council, to quickly coordinate any frequency request for PEACESAT service. Now, as to whether we support MARISAT as the alternative, I want to say yes, but I'm not certain that I am technically as well informed as I need to be to say yes.

I would be happy to submit for the record a specific response to that part of your question.

Senator INOUYE. I would appreciate that.

Mr. SIKES. That will be done.

Senator INOUYE. The international satellite market is undergoing radical change with the growth of separate satellite systems and the planned use of fiber optic cables. These competitors are threatening the formal monopoly of INTELSAT and COMSAT.

What view does NTIA have of the long term future of INTELSAT and COMSAT, and can they compete with these emerging competitors? And would NTIA suggest any changes to using COMSAT as the U.S. signatory to INTELSAT?

Mr. SIKES. Let me begin by saying that I think satellite communications will remain competitively strong. I believe it has certain characteristics—multipoint distribution being one of the principal ones—that will cause the satellite medium to remain a strong medium.

AT&T recently acquired much of COMSAT's earth station facilities, I think in a sense underscoring that point, underscoring the fact that, even though they are the major partner in both the trans-Atlantic and trans-Pacific cable operations, that they see satellite communications as an important part of their future mix.

Now, in respect to the INTELSAT monopoly, my view is, that because of the new cables and I would hope a coordination, successful coordination, this next month by the assembly of parties of the first separate system, that there will be in a sense a competitive offering of international service that will cause them to be less a monopoly. That will cause them to be more competitive in a broad range offerings, whether it is through innovation, service, pricing, as long as the pricing does not turn to the predatory side.

In respect to whether COMSAT should remain the gateway domestically, we are studying the Communications Act of 1962. We note the same changes in circumstances that you indicate in your question, and we believe that it is time to revisit the Communications Act of 1962.

But I do not have any firm judgments as to what we will specifically recommend. We have recommended, in respect to the proposed merger between COMSAT and CONTEL, in specific filings with the Federal Communications Commission, some greater oversight by the Government and perhaps a substitution by the Government in the case of conflict of interest between the Government's position and our signatory COMSAT's position.

We recommended that at this juncture because we believe with the merger with CONTEL there is a distinct possibility that the COMSAT interest will become more varied and, therefore, there might be a greater potential for conflict with the Government's position.

Senator INOUYE. I understand that a decision is almost upon us on the sale of the French switch manufacturer, CGCT. Since we last heard from you, what has the U.S. Government been doing to promote AT&T's chances of obtaining the contract to purchase this French company?

Mr. SIKES. First of all, we have been talking to AT&T to find out what they believe we can do that would be helpful, believing that as they work in the field, so to speak, that they would have some sense as to how the Government can be helpful.

Now, I must say I cannot tell you exactly what the United States Trade Representative has done or perhaps other organizations, like the State Department. I know that we have made inquiries with our friends, with the French Ministry of Post and Telecommunications.

I have been somewhat encouraged by the responses that I have received. They are, of course, now saying that this is going to be a commercial decision, not one based on politics.

One would, of course, expect them to say that. One would expect that when this decision is made it will be wrapped in commercial language, not political language. Our hope is that we do not have to wonder, you know, whether AT&T Philips, which clearly had the initial support within the French Government, will be the winning buyer of that portion of CGCT equity that the French will allow to be sold.

Senator INOUYE. I have a few other questions I will be asking, but I will set them aside for a while and call upon Senator Packwood.

Senator PACKWOOD. Thank you, Mr. Chairman.

Mr. Sikes, NTIA wants to require Government approval before the Bell operating companies can enter joint ventures with foreign manufacturers. Can you expand a little bit and tell me why, what you are worried about, and why it applies only to the Bell operating companies?

Mr. SIKES. First of all, I would like to put this in a more positive framework, which is to say that the Bell operating companies are now precluded from manufacturing, and we believe they should be able to manufacture. And, we believe they should be able to manufacture all lines of telecommunications equipment without any restraint whatsoever, with the single exception of the central switching equipment line.

Now, the reason we have suggested a screening approach—and I must say by way of caveat that that is still under discussion in the executive branch as to what kind of approach might be taken in this, what we call a zone of danger.

But the reason we see a zone of danger is that, with the breakup of AT&T, we actually created incentives for AT&T's offspring to do more and more business overseas. AT&T, on the other hand, in its effort to do business with comnpanies overseas frequently runs into the same kind of problem that we discussed in answer to the Chairman's question on CGCT.

Simply stated, many of those overseas markets are closed in the central switching equipment area. The procurement is typically handled by the Government, and we believe that allowing, in a sense, a company that has a very comfortable relationship within its domestic market, a sheltered relationship within its domestic market, preferential treatment in the U.S. market by entering into a joint venture with one of our large operating companies might pose certain risks to our indigenous central switch manufacturing capacity, which is a strategically important capacity.

And so that is the reason we suggested that there be some caution in that area.

Senator PACKWOOD. I am not quite sure I follow that. Is your reason a national security argument or simply a reciprocity argument? We cannot get in their markets and therefore you are not sure that you want to let them manufacture—possibly overseas—and be in our markets?

Mr. SIKES. I think it would spring from a reciprocity argument, which is to say that if AT&T can only deal in 50 percent of the world, but Siemens can deal in 80 percent of the world, then over time AT&T's position erodes. That is hurtful economically and I think it is hurtful from a national security standpoint eventually.

Senator PACKWOOD. Let us switch to scrambling. Both you and the Federal Communications Commission have recently finished a study in essence saying that you think that the marketplace will satisfy and take care of the frustrations many of our constituents are having with scrambling. Do you want to elaborate on that?

Mr. SIKES. Yes. I think, simply stated, from my standpoint probably the most convincing piece of information has been fairly recent. Viacom, which has Showtime and The Movie Channel, is now offering 11 basic services, including most of the popular ones—MTV, CNN, ESPN, and an additional seven services—together with its own movie services, for a rate that is, if anything, below the cable rate.

The 11 basic services are sold without a premium subscription for $6 a month, and with it for $11 a month. One of the movie channels on cable costs $10.95 a month, with the other one it costs $16.95 a month. That is if you buy them together.

Senator PACKWOOD. What you are saying is you will be able to buy the scrambled signal cheaper than cable?

Mr. SIKES. That is correct.

Senator PACKWOOD. And the marketplace will therefore push people over to the scrambled signal unless cable comes way down somehow?

Mr. SIKES. I think it will have those pressures, yes.

Senator PACKWOOD. Does not about 70 percent of your budget go to fulfill statutory radio frequency management functions for the Federal Government and related research activities?

Mr. SIKES. Yes.

Senator PACKWOOD. That does not leave much to spread the 30 percent around then, does it?

Mr. SIKES. No.

Senator PACKWOOD. What if a significant problem arises in the international area that is not anticipated in the proposed authorization levels? Would you have to rob Peter to pay Paul?

Mr. SIKES. Well, for several years we have been robbing Peter to pay Paul. Several years ago, the conference committee said that NTIA could use its carryover balances at that point to fund an international program, again because of a shortage of money.

We have been using those carryover balances, now for two years and at the end of this year they will be down to—I do not want to say zero, but very close to that. So the answer to your question is that it is a robbing Peter to pay Paul situation.

There is an immense acceleration just in the 12 months I have been here of international activity.

Senator PACKWOOD. What would you do? If you have got about 70 percent of your budget obligated by statute, you cannot shift that about?

Mr. SIKES. That is correct.

Senator PACKWOOD. Then what would you do? An across the board percentage cut, or cut personnel? Out of this relatively slight amount remaining, how do you take care of those problems that are going to come up that you have been taking care of out of your contingency fund?

Mr. SIKES. I think it is a matter of priority selection. First of all, if we do not get the $750,000 which would fund the international program and the China Protocol, I do not know what we would do.

If we get to the point of demands exceeding those levels, then it is simply priority selection. It is just that simple.

Senator PACKWOOD. Thank you, Mr. Chairman.

Senator PRESSLER. I have some questions that I will be submitting and I would like to submit a statement for the record at this time.

Senator INOUYE. Without objection, so ordered.

[The statement follows:]

OPENING STATEMENT BY SENATOR PRESSLER

Mr. Chairman, there are two areas in which NTIA is involved that I would particularly like to address very briefly and ask a question or two regarding each.[1] First, as you know, I like many members of this Subcommittee am not at all happy with the outcome of the the FCC's "must carry" rule and its apparent impact on public television stations. There has been a great deal of controversy and confusion over effect this rule is having on Public Television stations. It is important that we gather accurate statistics on this issue. Earlier this year several colleagues joined me in asking the FCC to keep accurate statistics on the number of Public Television Stations affected by the rule. The Commission replied that it would not be able to do so. It is important that we carefully monitor the impact of this rule on Public Television. It would be a great mistake to allow the implementation of the "must carry" decision to jeopardize the tremendous service supplied by Public Television in this country. I would hope that NTIA will be able to assist in monitoring the impact this rule is having in order that we are better able to make future policy decisions on this matter. The "must carry" issue has not been resolved with finality.

Second, let me say just a word about what NTIA has done on the AM Stereo issue. I have been very frustrated over the lack of action on this issue. We have in AM Stereo a technology that could provide a great service to the public. Yet, because of a lack of a uniform standard, this technology has been held back. The "marketplace" solution of the FCC has not worked as expeditiously as could have been the case if the standard had been established one half a decade ago. Earlier this year, NTIA conducted a study on AM Stereo technology, and on what steps could be taken to help renew the faltering AM radio service. The NTIA study suggests there may be hope in a "multisystem chip" solution, and proposed another study to investigate the technical viability of an automatic multisystem chip for AM stereo receivers. I do not know whether the multisystem chip approach may be a "solution" or not, but I am growing increasingly frustrated over the lack of progress in this area when government inaction has already retarded the development of this industry by five years, if not more. So I hope we can move forward in this area and get this important technology off the ground. We have waited long enough.

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[1] The questions and answers are on file with the Commerce Committee.

Senator INOUYE. Your agency administers the Public Telecommunications Facilities Program, PTFP, which provides grants to public broadcasting entities. In comments submitted to the FCC last year, your agency acknowledged that non-commercial educational stations increase the diversity of programming available to the public.

Many public broadcast stations rely upon PTFP grants to stay in business. Why then has the administration proposed to eliminate this program, if it is that good?

Mr. SIKES. Well, that I think has been a policy that dates back to probably 1980 or 1981. Not being here at the origin of it, I cannot personalize my answer. But I can say this: that the administration's basic view has been that the program was set up to distribute public radio and public television across the United States; that that has largely been accomplished, to the point that if you take in public television and radio together, we have reached a 97 percent penetration level; and that as a consequence, the program's mission has been completed; and that in a world of contracting—well, I do not want to say contracting revenues—but in a world of big budget deficits, that this is a program that should be terminated.

Senator INOUYE. You would rather have it terminated than have a reduced budget?

Mr. SIKES. I would imagine that there would be room for discussion. I must say that this is, again—you know, I do not want to indicate a lack of support for the recommendation. I do support the recommendation, but I doubt at this point that the Office of Management and Budget would want me to be entering into negotiations with you.

I mean, I presume they would regard that as their prerogative, Mr. Chairman.

Senator INOUYE. Under the so-called China Protocol, have any American businesses actually succeeded in increasing their business opportunities with the Chinese because of this protocol?

Mr. SIKES. No. The protocol was signed in April of last year. We took our first trip in November. I headed the delegation. I met with their Ministry of Electronics Industry, and did all I could to encourage them to enter into a joint venture with AT&T in both integrated circuits and central switch manufacturing.

There has not yet been a selection of a joint venture partner. They are considering AT&T along with NEC and Siemens. I also encouraged them to go beyond the demonstration level with the Motorola cellular radio system that had been set up with a single cell in Beijing. I think there is some encouraging sign in that area, according to what Motorola people tell me.

But to be able at this point actually to pinpoint as a result of the early work on the protocol a specific contract, I could not do that.

Senator INOUYE. In your testimony, you have indicated that your agency has played an active role in carrying on discussions with the West Germans, the Japanese, the Spanish, the Koreans, to open up their communications markets.

Have we had any good results?

Mr. SIKES. On the periphery, I think there have been some results. Europe tends to allocate market. I know AT&T has had a recent success in Spain. There is some other success, I think, in Spain.

I think we have made some progress toward the liberalization of the offering of private lines for the purposes of setting up value added networks, you know, transactional networks that frequently engage in airline reservations, banking transactions, insurance transactions.

I think there has been progress in that area. I think we have speeded up to a degree the certification procedures to get terminal equipment from U.S. providers certified so that it can then be sold in the market.

I would say to you that the successes that we have achieved have been modest at best.

Senator INOUYE. Competitiveness is a very important word today, and I believe the President is giving a speech on competitiveness today. And trade is also a big item on our legislative agenda in both houses.

What are you doing to promote competitiveness in American businesses abroad?

Mr. SIKES. Well, you know, at some risk of giving a too long answer, let me say that I believe that freeing up the Bell operating companies in the area of information services and in most respects in manufacturing would be a very positive step in competitiveness.

We, for example, have very low research and development expenditure by those companies, and I think we would see a rapid increase in that research and development expenditure if those two avenues were opened up. So that is one thing.

Secondly, I think the Government has a role and we are trying to play the role of helping our companies in the sale of telecommunications equipment and services into the developing world. Now, why should the Government help companies? Can companies not do it themselves?

Well, in the developing world it appears that we can open doors that companies sometimes cannot open for themselves. It appears that through our TDP program we can, through a planning approach, open doors that could not otherwise be opened.

And also, we think it is important to help internationalize, if you will, the U.S. telecommunications industry. We had a sheltered market domestically for decades. It resulted in an overreliance, in my view, on the domestic market.

And so in telecommunications, at least in some areas, clearly not in wireless nor in satellite or in some service categories, but in many other categories I think we are behind. I think we have not done as effective a job in selling overseas.

So we are trying to work in that respect as well, in the spectrum, in the standards area, again trying to keep standards from interfering with U.S. products that might otherwise be sold overseas, trying to make sure that we see maintenance and hopefully an enlargement of the spectrum available in areas where commercial innovation is so important.

So those are four kind of quick categories where we are trying to work to improve competitiveness.

Senator INOUYE. Do you believe there is a large market available in less developed countries, in third world countries?

Mr. SIKES. I do, and it is a tough market. It is tough because I think it is only going to be available to a degree with special financing packages. To me, in my experiences in China, you know, in the International Telecommunication Union, and in discussions with a number of developing world communications people here in the United States, I think they understand that a communications infrastructure is not only important, but it is literally a linchpin to their economic progress.

It is as dams, roads, highways, and airports were years ago. And so they are going to find the money to do it. Each of the Governments has put a high priority on it. It has now become a big priority in China in their five-year plan, where they are seeking to go between 1986 and year 2000 from, I think it is, 0.6 telephones per thousand to 2.8 telephones per thousand.

Well, that does not seem to be such a huge jump until you start to figure out how many people are in China. So the equipment is going to be purchased. The question is whether we are going to get what should be our competitive share of that.

And I do not mean by that to suggest a specific share, but whether, given the quality of our equipment, the price competitiveness of our equipment, we are going to be able to achieve a level that should be dictated by that, or whether we are going to be beaten because of soft financing and other incentives supplied by Governments in Germany and Japan and other places.

Senator INOUYE. What sort of relationship do you have with OPIC?

Mr. SIKES. Within the Department of Commerce? Some of the acronyms are still a bit new to me.

We have worked closely—that is what Bruce heads up. Oh, I am sorry. Excuse me. I have not personally had any relationship with OPIC. Perhaps I should. I have worked with AID, with TDP, with the Ex-Im Bank, and with the World Bank on the subject that we have just discussed.

Senator INOUYE. What sort of working relationship do you have with Ex-Im Bank?

Mr. SIKES. Well, the Ex-Im Bank, my own personal involvement with the Ex-Im Bank has been in a recent commitment of $100 million to Indonesia for them to procure high technology U.S. products. We have worked with the Indonesian Ministry of Post and Telecommunications through its director general, Mr. Abdul Rachman, to help identify U.S. telecommunications companies and products and services, hoping to take a significant portion of that $100 million credit, and believing that if we could get some of our companies in the door, so to speak, that they will have a much greater opportunity to sell into Indonesia in years to come.

Senator INOUYE. As you may have heard, the Government of the State of Hawaii is seriously considering the establishment of a spaceport in the southernmost part of the island chain. It just so happens that Hawaii is the southernmost land mass in the United States, thereby providing a good equatorial launch site.

I realize you have not studied this, but could you look into this matter and let me know whether you think such a plan is feasible?

Mr. SIKES. Yes, I will.

Senator INOUYE. If I may, I would like to have some of our Government officials meet with yours, if that is possible.

Mr. SIKES. Excellent. We would look forward to that.

Senator INOUYE. Well, Mr. Secretary, I thank you very much. I have several other questions, most of them of a highly technical nature, which I would like to submit to you for your study and response.

And with that, I would like to thank you for your assistance today, sir.

[Whereupon, at 2:40 p.m., the subcommittee was adjourned.]

[The following information was subsequently received for the record:]

DEPARTMENT OF COMMERCE,
Washington, DC, April 10, 1987.

Hon. Daniel K. Inouye,
Chairman Subcommittee on Communications, U.S. Senate Washington, D.C.

Dear Mr. Chairman: In the course of recent hearings on the National Telecommunications and Information Administration's (NTIA) pending authorization request, a question regarding Bell company participation in transoceanic fiber optic cable systems was asked for the record.

Our reply to this question is enclosed. Responses to other questions for the record are being prepared and will be provided as soon as possible.

If we can provide further information, we would be pleased to do so.

Sincerely,

ALFRED C. SIKES.

Enclosure

Question on Fiber Optic Cable

Q: "In its recent report on the potential impact on the U.S. trade posture of modifying or eliminating the line of business restrictions imposed on the Bell Operating Companies under the AT&T consent decree, NTIA expressed some concerns over the potential for an adverse trade impact arising from possible joint ventures between BOCs and foreign-based firms for the manufacture of telephone central office switch equipment. Is it your view that similar concerns might arise in connection with a joint venture between a BOC and a foreign firm for a private transatlantic fiber-optic cable system, or does such a joint venture present a different set of circumstances?"

A: The circumstances are different in at least two respects. First, virtually all of the transoceanic cables landing in the United States today are already jointly owned by AT&T, U.S. international carriers enjoying "indefeasible rights of user," and foreign-based communications administrations. This is because most experts assume that without foreign participation, foreign authorities are unlikely to permit transoceanic cables to access their markets directly. Bell company participation with foreign-based firms in private transoceanic cables would thus raise no new issues. Indeed, any concerns which might be raised with regard to such BOC joint ventures are less significant than might be raised in the case of transoceanic cables generally.

This is because, second, private transoceanic cables currently are subject to service limitations that do not apply to other cable facilities, such as those jointly owned by AT&T and foreign-based operations. In general, private cables may not be used to

provide public-switched message services, which currently constitute the majority of international communications traffic. The commercial success of private transoceanic cable facilities, therefore, depends in large measure on investors aggressively developing new service markets both here and abroad that are not now fully served.

In sum, BOC investment in private transoceanic cables should not be regarded as presenting international commercial concerns comparable to those which joint central office manufacturing presents. Such joint ownership is a necessary and commonplace means of participating in international communications. Such undertakings, moreover, may well benefit U.S. international trade significantly by leading to the further efficient development of new "niche" international communications service markets generally.

QUESTIONS OF SENATOR INOUYE AND THE ANSWERS

Question. "As you know, between 1971 and 1985, the PEACESAT program provided telecommunications to 110 terminals in the Pacific Islands through use of NASA's ATS-1 satellite, allowing remote island groups access to Honolulu, Guam, Japan, Australia, and New Zealand for medical and environmental emergencies, and for educational purposes. ATS-1 was deactivated in 1985 when it ran out of station-keeping fuel. The NASA ATS-1 Replacement Satellite Study recommended the Marisat Satellite as one of the most viable alternatives to reactivate PEACESAT. 1) Does NTIA support the use of the Marisat satellite as a replacement satellite for PEACESAT? 2) What will NTIA do to support the effort to reestablish the PEACESAT link?"

Answer. NTIA's efforts in the Pacific islands began with the co-funding with NASA of a major study (1980-82) of the telecommunications requirements of 14 countries in both the South (Polynesia and Melanesia) and Western (Micronesia) Pacific. Our telecommunications needs assessment, the present "Sky Channel of the Pacific" effort, and our ongoing discussions with PEACESAT project leadership keep us abreast of the situation. Earlier, one member of our staff was a PEACESAT user from 1974-79 and participated in the first major conference on the future of PEACESAT held in 1975 at the East-West Center in Honolulu. We thus understand the role this system can play throughout the overall region.

NTIA is exploring possible replacements for ATS-1 that might allow the PEACESAT network to resume functioning. An April 15, 1987 letter from Assistant Secretary Sikes to Donald Latham, Assistant Secretary of Defense for Command, Control, Communications, and Intelligence, requested the Defense Department's views on these matters.

We recently received a reply from the Defense Department. When we have had a further opportunity to weigh the available options, NTIA will be in a better position to provide the Subcommittee with firm recommendations on how most efficiently to reestablish PEACESAT's valuable service.

Question. "Japan is currently considering authorizing one alternate international communications carrier to compete with KDD, the current monopoly carrier. Pacific Telesis has agreed to join Cable and Wireless and Merrill Lynch in one of the two applications for this position. Recently, however, the Japanese have been encouraging the two applicants for this position to merge. Such a merger, however, would reduce the percentage of foreign ownership in the competing carrier from 33% to 3%. Secretary of Commerce Malcolm Baldrige has sent a letter to the Japanese ministry to discourage the Japanese merger plans. Is there anything more that can be done to promote the possibilities for American companies to enter the Japanese international market?"

Answer. The Administration has communicated with Japanese Government officials and expressed concern regarding the proposed "consortium" approach. Assistant Secretary Sikes discussed our concerns in meetings with Ministry of Posts and Telecommunications (MPT) officials in Tokyo in April 1987. The Reagan Administration has made this a priority item in discussions with Japanese officials.

The most recent MPT proposal is better than the initial approach advanced, in our judgment. No final resolution of this controversy, however, has yet been reached. We are thus continuing to work with other Executive agencies and hope ultimately to achieve a solution that is fair to U.S.-based communications firms and consistent with our national interests.

Question. "NTIA is requesting $225,000 for carrying out an agreement called the China Protocol, which is intended to encourage the opportunities for American business investment in the People's Republic of China. What specifically have the Chinese agreed to do under this agreement? What services has the U.S. agreed to provide?"

Answer. Specific activities under the "China Protocol" for fiscal year 1988 have not yet been finally defined. During fiscal year 1987, however, a joint U.S. Government-industry study group visited the People's Republic and conducted a three-week survey of communications activities taking place under the auspices of the Ministry of Posts and Telecommunications. A draft report on that group's findings was recently provided to the Ministry. Detailed recommendations for improving the telecommunications infrastructure in China are contained in the draft report, together with other suggestions for areas of future technical cooperation between China and the United States in the telecommunications field. Over the next two months, the fiscal year 1988 program will be developed through discussions between NTIA and MPT officials.

Article II, section II, para. 4 of the U.S.-China Protocol on Cooperation in the Field of Telecommunications states that there should be bilateral cooperation in telecommunications technology, and in the application of communications to meet both civil government and commercial needs. Some of the areas which are being considered for future bilateral technical cooperation include:

—Development planning. Efficient transition from an analog to digital communications system; national and international data transmission;

project control and coordination; forecasting techniques; use of cellular radio technology for multiple applications; and communications

satellite planning.

—Computer-based support systems. Network management; radio frequency spectrum management; automated directory assistance; systems engineering and operations research; customer and plant assignment records; management information systems; automated traffic usage reporting.

—International services. Service quality measurement; multiple-hop

control; use of echo suppressors and cancelers; integration of terrestrial and satellite services.

—Service standards. Switching, transmission, and outside plant maintenance; technical specifications and standards; quality of service standards.

—Commercial operations. Rate and tariff development; revenue requirements; business planning; financial methodology studies; division

of revenues for domestic and international studies. *Question.* "NTIA also requests $500,000 in part to conduct studies of telecommunications needs in less developed countries. What kind of studies have been carried out? What kind of studies are planned for the coming year?"

Answer. NTIA's efforts regarding developing countries commenced following publication of the report of the Maitland Commission, which estimated that $12 billion will be needed annually to meet basic telecommunications requirements in developing countries as we approach and enter the next century.

A 1985 NTIA-led U.S. Government-private sector mission to the Federated States of Micronesia (FSM), the Republic of Palau, and the Republic of the Marshall Island served as a prototype for our efforts in the Caribbean, China, and Southeast Asia.

In March 1985, all three Pacific island countries were about to commit to turn-key contracts with Japan-based telecommunications firms and their Korean subcontractors. Subsequently, however, these governments have retained U.S. engineers to write specifications for U.S. loan applications —and have virtually guaranteed the purchase of equipment that is at least 51 percent U.S.- manufactured.

These are results of our efforts in the Pacific:

—Finley Engineering, Lamar, Missouri, won a $55,000 pre-loan contract in the FSM. The FSM total loan request is for $41 million and will involve U.S. construction and equipment.

—Hicks and Ragland of Lubbock, Texas, secured a $35,000 pre-loan contract and a $900,000-$1.3 million contract in the Marshall Islands. A $9.45 million preliminary loan request has been submitted to REA by the Marshallese Government.

—Orion Telecommunications Ltd., Washington, D.C. won a $75,000 pre-loan contract in Palau, and another $96,000 construction contract. Through a 10-year revenue-sharing

arrangement. Orion is undertaking an $8.5 million contract with the Palau National Communications Corporation.

—FSM Government has requested technical opinions from NTIA. The NTIA-private sector approach has also been successful in the Caribbean, Central America, and more recently in Chile.

These are results of our efforts in the Caribbean:

—In fiscal year 1986, NTIA completed two reports as part of a Caribbean telecommunications infrastructure development project. The first, "Definition Mission to Jamaica, February 2-13, 1986," describes the findings of a joint U.S. Department of Commerce-U.S. industry technical assessment team which identified 11 projects that would strengthen Jamaica's telecommunications infrastructure. As a result, the Jamaican Government has forwarded requests to the U.S. Trade and Development Program for funding of feasibility studies for four of these projects. These studies would be undertaken by U.S. firms. Additionally, discussions between NTIA officials and the Jamaican Ministry of Transport and Public Utilities indicate that the Jamaican Government will relax restrictions on private ownership of customer premises equipment.

—The second report, "Guatemala Telecommunications Technical Assessment, May 1986," was also undertaken jointly by the U.S. Department of Commerce and representatives of the U.S. telecommunications industry. Industry participants were funded by their companies; NTIA and the International Trade Administration bore the cost of participation of their personnel. In preparation for this technical assessment, the team met with Guatemalan officials and identified 16 projects that would strengthen the Guatelmalan telecommunications infrastructure.

—In this respect, BellSouth subsequently won a $400,000 contract for the management of a 110,000-line telephone system expansion program.

—GUATEL, the telecommunications authority, has requested and received assistance from USAID for a scope of work study looking toward partial privatization of telecommunications services.

—GUATEL has joined—and last month hosted a meeting of—a regional telecommunications organization, the Caribbean Telecommunications Council, the development of which NTIA has fostered since its inception in 1985.

—GUATEL has requested funding for feasibility studies by U.S. firms from the U.S. Trade and Development Program for four of the NTIA-identified projects.

NTIA continues to seek innovative ways to aid expansion of telecommunications in developing countries. We are currently in the process of selecting the next Caribbean or Central American country for an NTIA-private sector technical needs assessment later this year. After a recent preliminary visit to the Philippines, and hosting a two-day visit by the Director General of Posts and Telecommunications of Indonesia, we are also exploring further work with the Association of Southeast Asian Nations (ASEAN).

The NTIA approach has been successful because telecommunications is government-driven in virtually all developing countries, and U.S. Government-assisted entree is thus critical to the success of American firms in these new markets. The U.S. Government, however, also benefits from these NTIA-led missions. Relationships are forged during these visits that can be of value in international telecommunications regulatory forums where the United States faces the reality of one nation/one vote.

NTIA has undertaken this developing country initiative with caution, focusing first on small countries known to be friendly to the United States. NTIA intends to undertake an in-depth study of the factors that influence the success of a telecommunications company in these developing markets.

Question. "Proposals have been submitted before the WATTC international conference that would subject 'value-added' services to international regulation. The U.S. has essentially deregulated these services domestically. What steps is NTIA taking to prevent the WATTC from regulating these services? If WATTC agrees to regulate them, what effect will this have on the ability of American firms to provide 'value-added' services abroad?"

Answer. A World Administrative Telephone and Telegraph Conference (WATTC) will be convened by the International Telecommunication Union (ITU) in 1988. The United States has not yet developed final positions for presentation to the WATTC. The United States, however, will seek to ensure that no new regulations are adopted

which impede efficient development of services not now regulated as common carrier offerings in the United States, which would include most "value-added" services. In this regard, our views likely would be echoed by those of Great Britain and Japan which similarly place minimal regulation on most new "value-added" services. Imposition of economic or entry regulation, or both forms of regulation, on such new offerings would adversely affect the ability of firms including U.S. firms to offer these services which are increasingly valued by users. Unwarranted regulation could also generate needless inefficiencies that would ripple throughout the world economy. We would thus strongly oppose unwarranted regulation of international or domestic value-added offerings.

Question. "NTIA is currently conducting a study of alternatives to rate of return regulation. When is this study expected to be complete?" What recommendations will be made by this report?"

Answer: We anticipate completing this study in May 1987, and to recommend substantial reforms in prevailing Federal and state rate base regulation. As indicated in the request for comments which we published in the Federal Register last fall, we believe steps can and should be taken to reduce the economic costs of the current regulatory regime. We have not yet finally determined precisely which steps should be recommended, but expect to do so soon.

Question. "The FCC has proposed to use its Part 68 registration requirements to limit imports of telecommunications equipment from countries that restrict entry by American firms. Does NTIA support this proposal? Does NTIA believe that the FCC is authorized to engage in trade matters under the Communications Act. Does the FCC have the expertise to carry out this plan?"

Answer. As indicated in recent testimony before the Subcommittee, NTIA filed comments in the FCC's "trade" proceeding on April 17 on behalf of the Executive branch. These comments were coordinated with seven departments and agencies and thus represent the Executive branch's views on the FCC's proposals. A copy of these comments is enclosed.

Question. "As you may have heard, the government of the State of Hawaii is seriously considering the establishment of a spaceport in the southern-most part of the island chain. Since Hawaii is the southernmost land mass in the United States, it provides a equatorial launch site. I realize that you have not studied this issue, but could you look into this matter and let me know what policy and technical advice NTIA could provide to assist in the creation of a joint venture between the government of the State of Hawaii and private land owners to establish a spaceport? Please tell me what steps you plan to take to provide this assistance and when you could report back to me on your results."

Answer. NTIA does not have statutory authority to conduct a feasibility or other study regarding this proposed commercial project. We know of no Federal agency that would be able to undertake such a venture.

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